REMARKS

INTRODUCTION

In accordance with the foregoing, claims 1-5, 11, 12, 18, and 20 have been amended. Reconsideration of the allowability of the pending claims is respectfully requested.

Claims 1-20 are pending and under consideration.

Briefly, it is further noted that only claims 1-4 above have been substantively amended. Of the remaining claims 5-20 that may have been amended, such amendments have only been made to ensure the pending clams in are in the best condition for appeal to avoid any potential §112 indefiniteness issues.

In this regard, the Examiner has properly interpreted the claims with the same meaning as the above amendment, i.e., where applicant claimed selecting an analog signal or a digital signal, the Examiner properly interpreted this 'or' as being linked with the 'selective' language, compared to an improper interpretation of the "or" as providing merely an alternative. Here, though applicants and the Examiner have properly interpreted the claims to not provide such alternative language meaning, above claims have been amended to ensure that such meaning in maintained through later prosecution, including any potential appeal processes. Thus, the amendments to claims 5, 11, 12, 18, and 20 do not raise new issues or require additional searches and do not change the scope or breadth of the claims. The Examiner has already similarly interpreted the claims.

REQUEST FOR EXAMINER'S RESPONSE TO APPLICANTS PREVIOUS REMARKS

In applicants remarks filed November 13, 2006, it was noted that "each and every feature in each claim <u>must</u> be addressed and a prima facie obviousness case must be made for each feature not present in the primary reference. <u>The combination of one feature from a secondary reference into a primary reference does not mean that each and every feature from the secondary reference inherently follows</u>. Further, it is further submitted that regardless of the opinion of the Examiner that a primary reference may be modified to meet one missing feature, more than a conclusory statement is required as to why the modified primary reference would further perform/accomplish another missing feature or why that additional feature would have been obvious."

The applicants response further provided the example of the Office Action seting forth that Cummins et al. U.S. Patent No. 5,784,120, could be modified into Bestler et al., U.S. Patent No. 5,638,112, to disclose the claimed extracting of the synchronous signal.

However it was pointed out that Cummins et al. merely discusses a method for using an extracted synchronous signal during a *re-sampling* in an Analog-to-Digital (ADC) conversion of the same input analog video signal, i.e., Cummins et al. discuses a method of ensuring that an input analog signal is properly A/D converted to a digital version of that analog signal.

Again, for this use of the synchronous signal, the only correlation to Bestler et al. would appear to be when the analog video is converted to digital form in A/D converter 74.

Thus, the teaching of Cummins et al. to extract a synchronous signal from an analog signal would only appear relevant to a minor portion of Bestler et al., after the analog broadcast composite video has been decoded to analog broadcast YUV signals and during the digitizing of the analog broadcast YUV signals, before any interaction with any additional information. **Briefly, the Office Action's reliance on the extraction of a synchronous signal for improved A/D conversions to avoid "jitters" in an A/D circuit is not the same "jitters" as discussed in the present application when switching between analog and digital sources, i.e., different solutions are being presented for different problems even though a similar "jitter" term is used.**

However, regardless of applicants above remarks, the Office Action again states that Cummins et al. teaches: "separating the horizontal sync or vertical sync signals from the incoming broadcast signal, and using this information to adjust the signal to a digital form;" and extrapolates from this interpretation that it would have been obvious to modify Bestler et al. to do the same.

Thus, again, it is noted that regardless of an obviousness of modifying the A/D converter 74 of Bestler et al., based upon this teaching of Cummins et al., the Office Action (as recited on page 5 of the Office Action) attempts to either further modify Bestler et al. or argues that such a modification would result in the claimed encoding of the additional information according to the extracted synchronous signal. Particularly, on page 2, the Office Action points to the CV encoder 80 of Bestler et al. generating a corresponding NTSC format analog composite video baseband output signal, and states "[t]hus the combination of Cummins (which teaches extracting

synchronous data from a video signal, col. 4, lines 45-67) with Bestler meets the claimed feature."

Therefore, in this example, the Office Action has relied upon Cummins et al. to support a modification of Bestler et al. to extract a synchronous signal for better A/D conversion of analog signals, and then broadens the use of the synchronous extraction to argue that un-related portion of Bestler et al. would now use that extracted synchronous signal.

Further, the CV encoder 80 is unrelated to the A/D converter 74, and any use of an extracted synchronous signal by A/D converter 74 (for the use taught by Cummins et al.) would not have any relationship to any workings of encoder 80, i.e., just because the synchronous signal is extracted does not mean that any alternate use of the synchronous signal is obvious or derives from the same modification.

Again, similar remarks were presented in applicants previous remarks, and have not been addressed by the outstanding Office Action.

In particular, the previous and above remarks particularly point out the operation of the relied upon portion of Cummins et al., particularly pointing to the underlying need/benefit for the same in Cummins et al.

The Office Action has not addressed these remarks and had not presented any countering remarks refuting the same.

Thus, aplicants again respectfully submit that if Cummins et al. is reviewed in more detail it will be clear that the application and benefit of the feature of Cummins et al. is unrelated to the Office Actions relied upon teaching applied to Bestler et al.

The Office Action remarks that the teaching of Cummins et al. would lead one skilled in the art to modify a generation of a generated composite analog to now extract synchronous data from the video signal **(first)**, and then takes that generated synchronous data and uses the same for **(second)** encoding of the additional information with that extracted synchronous data.

For this second aspect of the purported modification of Bestler et al., the Office Action provides no support of why one skilled in the art would now take the extracted synchronous data, extracted from a video signal, and then use that extracted synchronous data for encoding the additional information.

In summary, as noted in at least MPEP 707.07(f), the Examiner is required to answer and address all traversals. This requirement is in addition to any repetition of a previously held

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position and is required to allow the applicant a chance to review the Examiner's position as to these arguments and to clarify the record for appeal.

Additionally and as further noted in MPEP 707.07(f), a failure of the Examiner to address the applicant's traversals can be deemed a failure to rebut these arguments so as to admit that the arguments have overcome the rejection. At the very least, the failure to address the applicant's traversals would render the Examiner's decision to again reject the claims arbitrary and capricious and invalid under the Administrative Procedures Act, 5 U.S.C. § 706, the standard under which such rejections are reviewed in view of Dickinson v. Zurko, 527 U.S. 150, 50 USPQ2d 1930 (1999).

Thus, again, applicants respectfully request that any further Office Action specifically address the above specifically point out why applicants analysis of either of Cummuns et al. or Bestler et al. is in error.

REJECTION UNDER 35 USC 103

Claims 1-5 and 7-16 stand rejected under 35 USC 103 as being obvious over Bestler et al., U.S. Patent No. 5,638,112, in view of Cummins et al., U.S. Patent No. 5,784,120, and Devaney, U.S. Patent No. 6,357,045. This rejection is respectfully traversed.

Without traversing the previous set forth remarks, which are again maintained, applicants further respectfully submit that none of Bestler et al., Cummins et al., or Devaney disclose or suggest at least the claimed generating of the additional information, the overlaying of the generated additional information with the MPEG processed video signal from the received digital broadcasting signal, the encoding of the additional information according to the extracted synchronous signal, the analogizing the encoded additional information, the overlapping of the analogized additional information with the analog broadcasting video signal separated from the analog broadcasting signal, and the transmitting of the analog broadcasting video signal overlapped with the analogized additional information, as set forth in independent claim 1.

As an example, none of Bestler et al., Cummins et al., or Devaney disclose or suggest that the generated additional information is encoded based upon the extracted synchronous signal, then analogized, and then overlapped with the analog broadcasting video.

In Bestler et al., as shown in the only figure, analog video component video is output from the analog demodulator 28. The YUV of the analog video component video is then digitized by A/D converter 74 and provided to display map normalizer 70.

Further, in <u>Bestler et al.</u>, the output of mixer 64 provides digital YUV data also to the map normalizer 70. Here, the mixer 64 is provided with MPEG decoded digital broadcasting video and generated YUV data for the OSD .

Thus, apparently, normalizer 70 is provided either digitized analog video YUV data of the analog broadcasting signal, a mixture of the YUV data of the digital broadcasting signal and the YUV data of OSD, or both the digitized analog video YUV data and the YUV data of only the OSD.

The corresponding <u>mixed</u> output of the display map normalizer 70 is a final YUV data for the output signal, and is finally D/A converted to an analog YUV signal, converted to component video, and then output.

However, at no time does <u>Bestler et al.</u> suggest or disclose that the OSD data is analogized before "overlapping the analogized additional information with the analog broadcasting video signal separated from the analog broadcasting signal."

The complete arrangement of <u>Bestler et al.</u> is fundamentally counter to such an overlapping of the additional information after it has been analogized.

Rather, <u>Bestler et al.</u> focuses on converting the analog video signal to the digital domain and then combining a digital version of the analog signal with digital data of the OSD. Only thereafter is the resultant mixed signal analogized to an analog YUV signal.

Thus, even if the aforementioned teachings of <u>Cummins et al.</u> and <u>Devaney</u> are combined with <u>Bestler et al.</u>, <u>Bestler et al.</u> is still not open to a modification a set forth in independent claim 1.

Regarding claim 5,

Claim 5 at least requires the synchronous separation unit to **extract a synchronous signal from the analog broadcasting signal**, an additional information process unit to generate additional information, a video encoder unit to encode, when the digital broadcasting channel is selected, **the MPEG processed video signal and the additional information** into an encoded analog video signal **according to** a second control signal of the plurality of control signals and **the synchronous signal**.

For analog broadcasts, the claimed video mix unit is used to mix the analog video signal from said air tuner and **the encoded** additional information.

Thus, again, differently from that of <u>Bestler et al.</u>, the synchronous signal from the analog

broadcasting signal is used in the encoding of the additional information. In addition, encoding of the MPEG processed video signal is also based upon the synchronous signal.

Conversely, <u>Bestler et al.</u> would not use the synchronous signal data of the analog signal for encoding of either of the additional information or the digital MPEG signal.

Further, as noted above, <u>Cummins et al.</u> particularly discusses the using of a synchronous signal of a signal for a particular A/D conversion of the same signal.

Thus, <u>Cummins et al.</u> cannot be relied upon for teaching to now use the extracted synchronous signal for encoding of a <u>different signal</u>, e.g., the additional information of the MPEG information. This is not the disclosure or representative of the teaching of <u>Cummins et al.</u>

Here, it is again noted that claim 11 similarly sets forth the encoding the video signal from the digital broadcasting signal and the additional information based on the extracted synchronous signal.

Claims 6 and 17 stand rejected under 35 USC 103 as being obvious over <u>Bestler et al.</u>, <u>Cummins et al.</u>, and <u>Devaney</u>, in view of <u>Achiha</u>, U.S. Patent No. 4,530,004. This rejection is respectfully traversed.

It is respectfully submitted that <u>Achiha</u> similarly fails to disclose or suggest the above deficiencies of <u>Bestler et al.</u>, <u>Cummins et al.</u>, and <u>Devaney</u>. Withdrawal of this rejection is respectfully requested.

Claims 18-20 stand rejected under 35 USC 103 as being obvious over <u>Devaney</u>, in view of <u>Cummins et al</u>. These rejections are respectfully respected. This rejection is respectfully traversed.

First, as only an example, it is noted that the Office Action sets forth that <u>Devaney</u> discloses the claimed:

"to selectively synchronize <u>phases</u> of the second digital broadcasting signal with the first analog broadcasting signal and the second analog broadcasting signal with the first digital broadcasting signal, <u>respectively, preventing jittering from occurring in output video upon the tuning unit changing selection between the first digital broadcasting signal and the second analog broadcasting signal, or between the first analog broadcasting signal and the second digital broadcasting signal</u>," as recited in claim 18, for example.

In particular, the Office Action relies upon col. 4, lines 24-60, of <u>Devaney</u> to disclose this claimed synchronizing of phase.

Apparently, the Office Action is also relying upon <u>Cummins et al.</u> to disclose the claimed preventing of jitter.

Regardless, it is respectfully submitted that the cited portion of <u>Devaney</u> still fails to disclose the claimed synchronizing of phases of the second digital broadcasting signal with the first analog broadcasting signal and the second analog broadcasting signal with the first digital broadcasting signal.

The cited portion of portions of <u>Devaney</u> merely state that when two video sources feeds are to be simultaneously displayed, the analog video signal is converted into MPEG format, so that both the converted MPEG version of the analog video signal and an already MPEG format second video source can be simultaneously displayed.

This conversion of the analog video source into the MPEG format does not support or suggest the claimed synchronizing of phases between two sources.

Rather, this conversion of the analog video source into the MPEG format would appear to be performed outside of any information of the alternative video sources. Once the analog video source signal is converted to the MPEG format, then the all digital MPEG video feeds are combined for simultaneous display.

Again, there is no disclosure or suggestion that there is any synchronizing of an analog video source and a digital video source in <u>Devaney.</u>

Further, for claimed jittering, the Office Action would again appear to have expanded the teaching of <u>Cummins et al.</u> to essentially mean the application of an extracted synchronous signal for any use, stating that <u>Cummins et al.</u> "teaches a method of extracting synchronous data from a video signal...." and arguing that such a teaching supports a modification of <u>Devaney</u> to extract horizontal sync or vertical sync pulses from an analog input signal "for the well known benefits for avoiding overflow of video into buffers, which prevents distortion."

The Office Action has argued that it would have been obvious to incorporate the extraction of synchronous data from a video signal of <u>Cummins et al.</u>, "to extract horizontal sync or vertical sync pulse signals from an analog input signal for the well-known benefits of avoiding overflow of video into buffers."

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Thus, though there is no apparent need of this feature in <u>Devaney</u>, the Office Action is modifying <u>Devaney</u> to have a result that reduced "jitter' as described in <u>Cummins et al.</u>

However, the present application particularly explains the context of the term "jitter", and the Office Action's reliance on the extraction of a synchronous signal for improved A/D conversions to avoid "jitters" in an A/D circuit is not the same "jitters" as discussed in the present application when switching between analog and digital sources.

Here, the application's definition and context of the term "jitter" is the definition that is applicable to the claims. Any definition that diverges from that example/description in the specification is <u>not</u> a reasonable interpretation.

Thus, though <u>Cummins et al.</u> uses the term "jitter", it is for a completely different problem than that described in the specification and the claims. Thus, regardless of the rationale for modifying <u>Cummins et al.</u> into <u>Devaney</u>, the resultant combination still would not disclose the claimed invention.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.
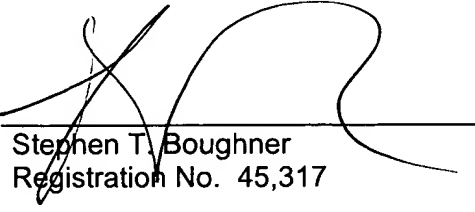
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: _3/13/07_

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